

The Story So Far

February 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11 4K Wave	12	13	14	15 Cold in both rings	16
17	18 PP12 lattice test evening	19	20	21	22	23
24	25	26	27	28	29	30
PS gave us e-lens		First Collisions			Overnight Stores 109x109	
					Start Physics	

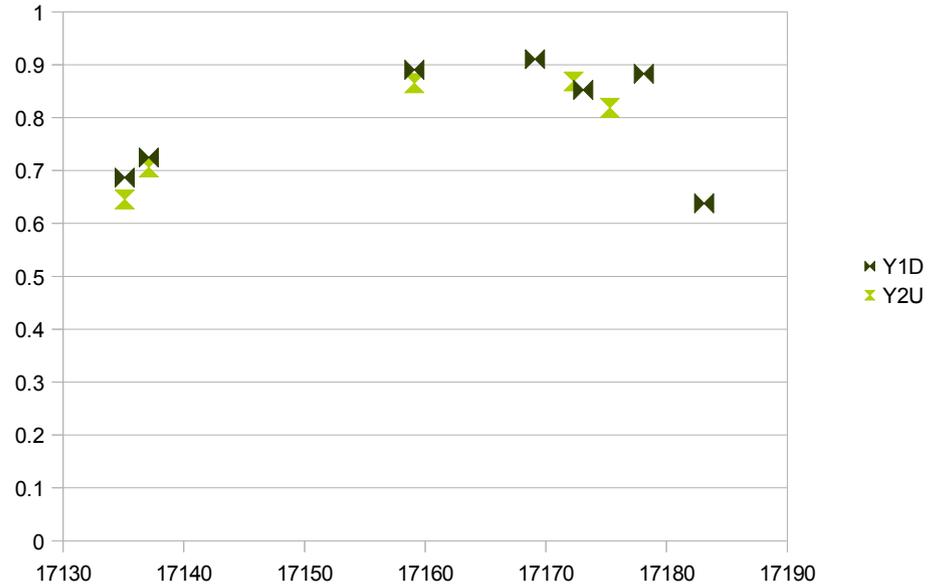
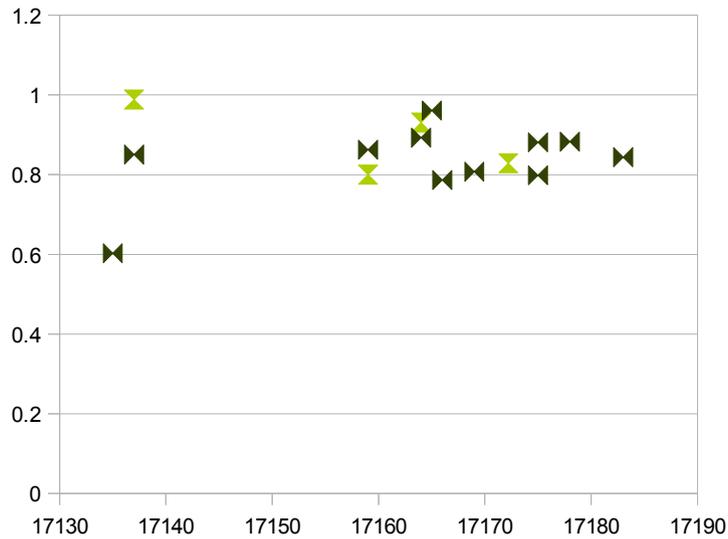
March 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11 12 13 14 6 hour stores with tune between				15 PA Maintenance	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

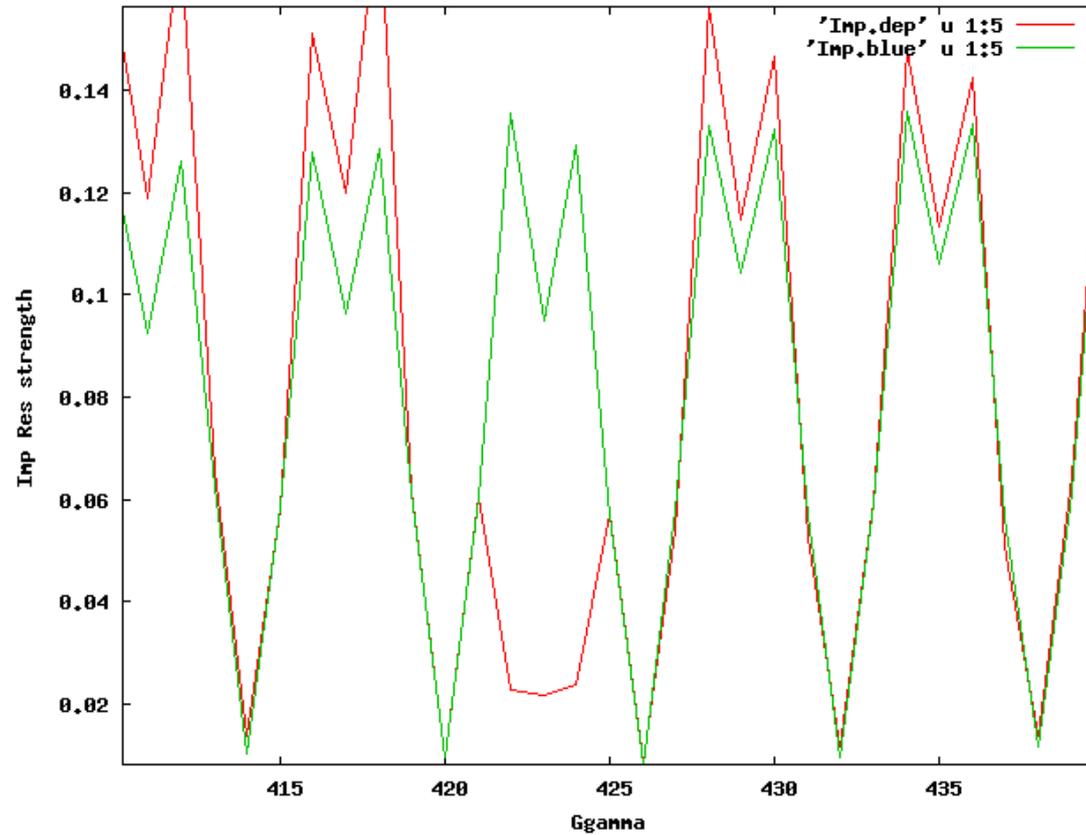
Issues past week

- OPPIS down last Friday ran with unpolarized store
- Many issues getting through store ramp
 - Feedback issues
 - Approach to 2/3 resonance
- Polarization still low and RHIC TM efficiency $\sim 0.8-0.85$
 - Restored snake settings for early part of energy ramp
 - Lowered earlier in ramp
 - Measured Polarization on ramp: identified gg422 as our culprit. Due to large Imperfection Resonances caused by larger separation bumps this year. Yellow suffers most
 - Measured Optics on Ramp using artus kicker

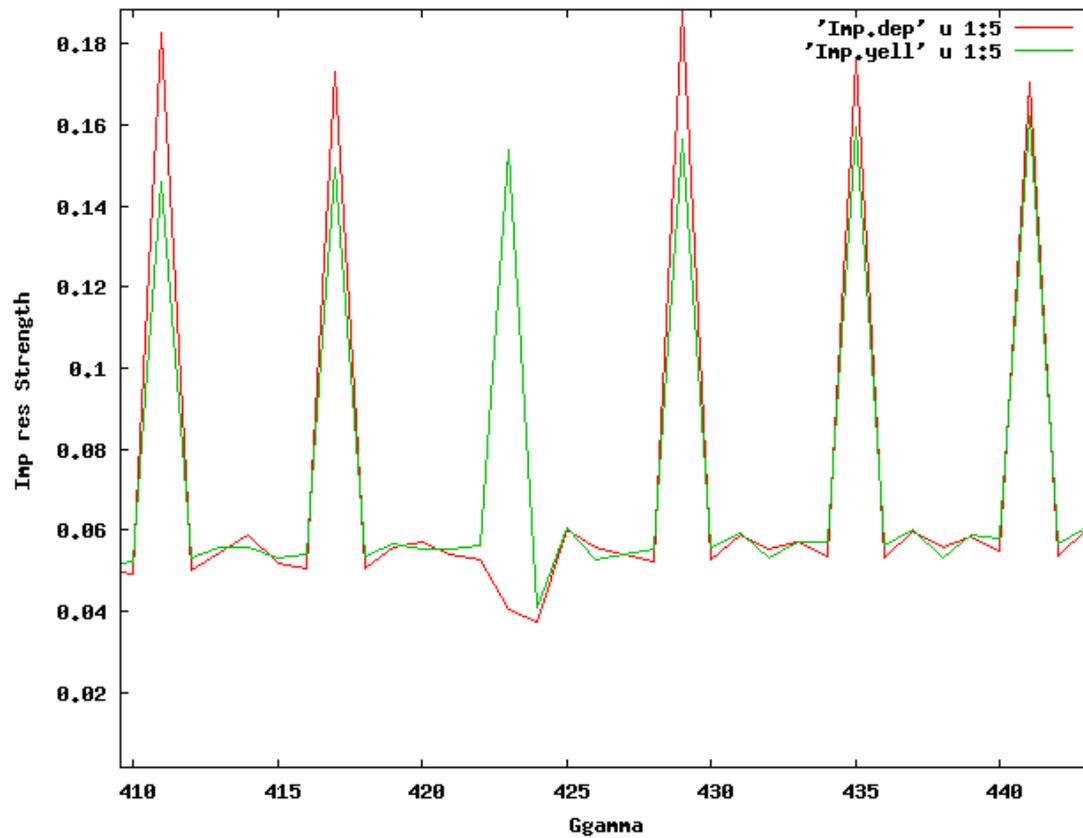
Polarization Transmission Efficiency in RHIC



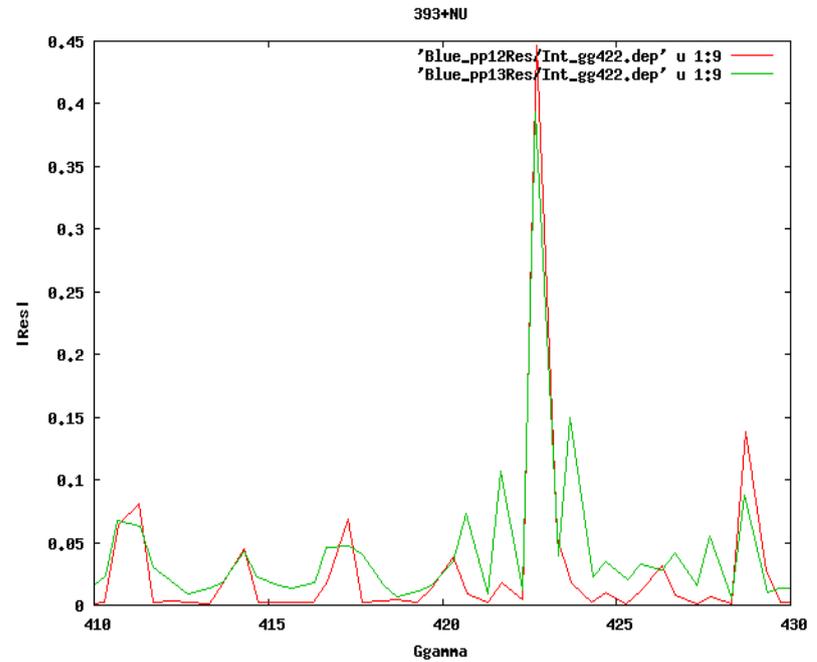
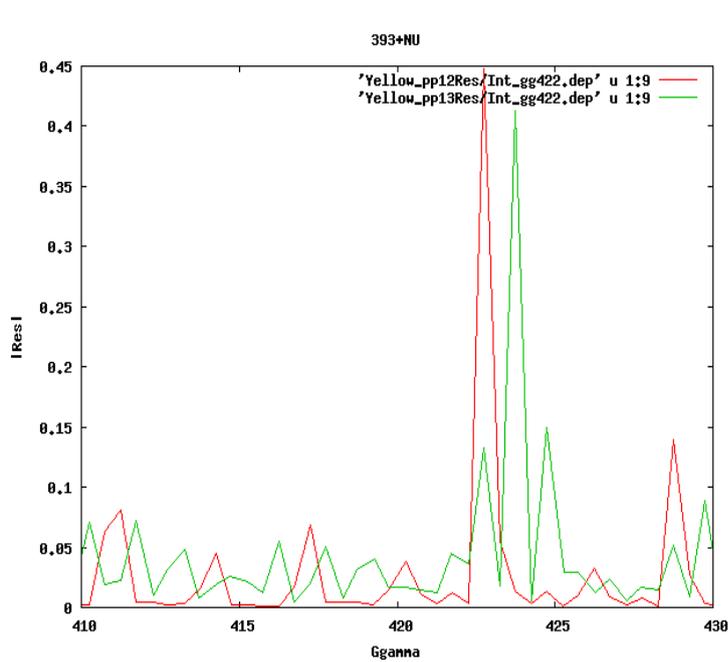
Blue Imperfection Bump



Yellow Imperfection Bump

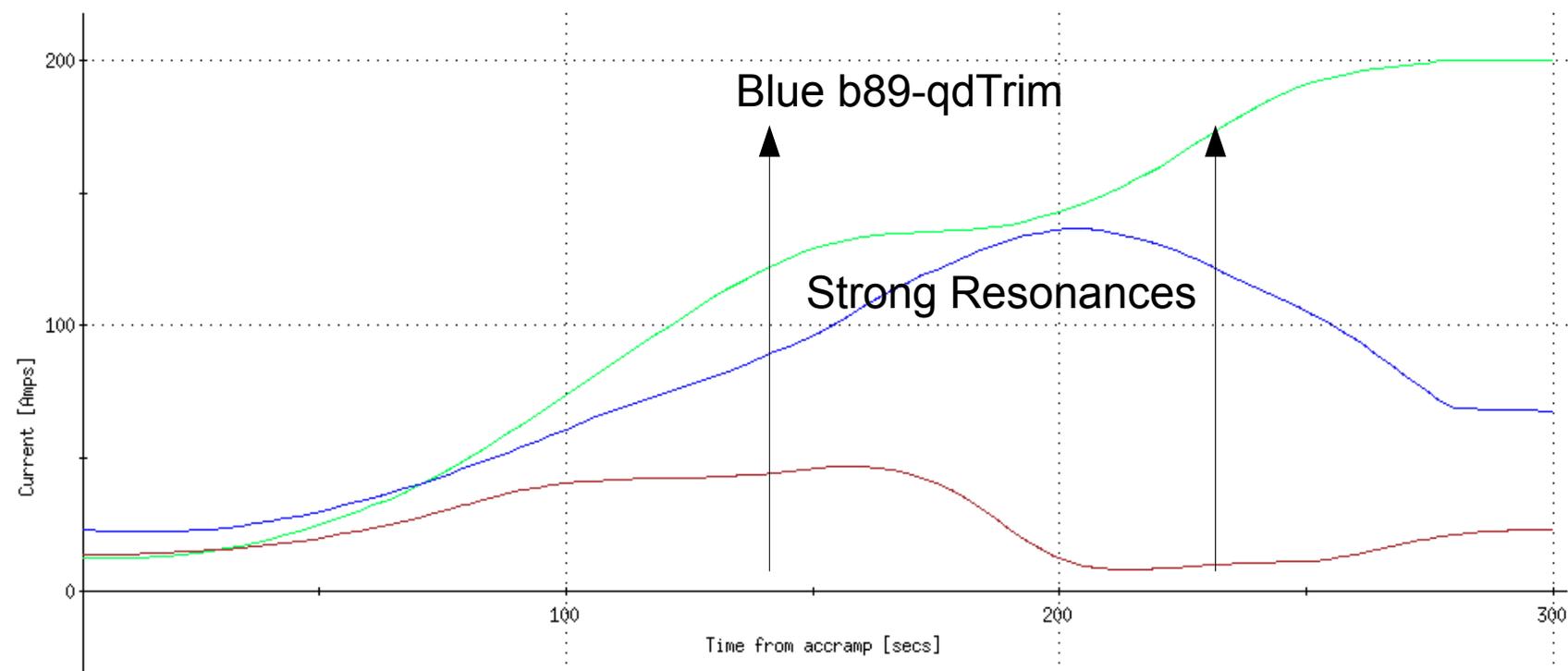
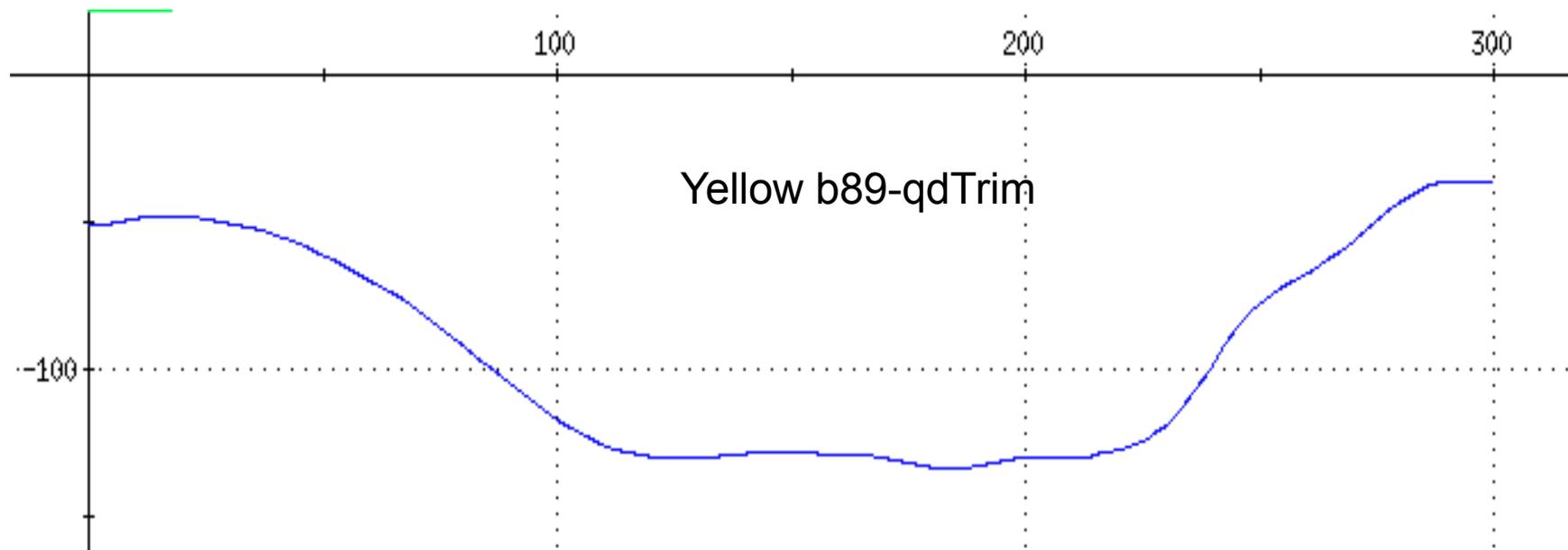


Design Resonance Structure



Reduced Resonances by 10 to 14%

Resonances	Blue (new-old)	Yellow (new-old)
231+NU	-0.0387	-0.0415
411-NU	-0.06134	-0.0655
393+NU	-0.05347	-0.0347



Future Plans

- Applied bump in Yellow just now: If works apply to Blue
- Try and reduce separation bumps on ramp
- Understand and fix issues with rotator ramps